Combined Heat and Power Amendments to 310 CMR 7.70 Massachusetts CO₂ Emission Budget Trading Program Regulation

ADD the following Definitions

310 CMR 7.70(1) CO₂ Budget Trading Program General Provisions.

(b) Definitions

Combined Heat and Power (CHP) CO₂ Budget Source. A CO₂ Budget Source that contains one or more CO₂ Budget Units which generate electrical and Useful Thermal Energy thermal energy in a single integrated system.

<u>Useful Net Thermal Energy</u>. Energy (a) in the form of direct heat, steam, hot water, or other thermal form that is used in production and beneficial measures for heating, cooling, humidity control, process use, or other valid thermal end use energy requirements, <u>excluding thermal energy used in the power production process (e.g., house loads, parasitic loads)</u>, and (b) for which fuel or electricity would otherwise be consumed.

<u>Useful Thermal Energy Account</u>. An account established for the purpose of retiring allowances pursuant to 310 CMR 7.70(5)(c)5.b.

ADD 310 CMR 7.70(1)

- (h) Exemption for any CO2 Budget Source that is a Combined Heat and Power CO2 Budget Source.
 - 1. Applicability. Notwithstanding 310 CMR 7.70(1)(d) of this regulation, a), any entity owning, operating, or controlling a combined heat and power CO₂ budget source under 310 CMR 7.70(1) of this regulation that is a Combined Heat and Power CO₂ Budget Source that sells its Useful Thermal Energyuseful net thermal energy shall comply with all of the provisions of this regulation310 CMR 7.70, except that it may subtract from its total CO₂ emissions recorded for compliance under 310 CMR 7.70(6) the amount of CO₂ emissions associated withattributable to the production of Useful Net Thermal Energyuseful net thermal energy as long as it complies with all of the provisions in 310 CMR 7.70(1)(h).
 - 2. <u>Compliance</u>. <u>Combined Heat Power CO2 Budget sources Any entity owning, operating, or controlling a combined heat power CO₂ budget source shall comply with the compliance requirements in 310 CMR 7.70(6)(e)2.</u>
 - 3. <u>Monitoring and Reporting</u>. <u>AAny entity owning</u>, <u>operating</u>, <u>or controlling a combined heat and power</u> CO₂ budget source that is a Combined Heat and Power CO₂ Budget Source shall monitor and report the amount of annual gross generation of CO₂ mass emissions (expressed in tons) associated with the production of Useful Net Thermal

Energyuseful net thermal energy pursuant to 310 CMR 7.70(8)(i) for the control period beginning 2015 and each year thereafter.

- 4. Change to Previously Reported Emissions. A CO2 Budget Source that isAny entity owning, operating, or controlling a Combined Heatcombined heat and Powerpower CO2 Budget Source budget source that previously reported its annual gross generation of CO2 emissions for the interim control periods of 2015 and 2016 pursuant to 310 CMR 7.70(4)(a), but did not deduct its CO2 emissionemissions associated with the production of useful net thermal energy as allowed for under 310 CMR 7.70(1)(h), may change its Compliance Reportsubmit revised compliance certification reports to the Department under 310 CMR 7.70(4)(a)3.d. and e., to deduct that deducts the amount of CO2 mass emissions from attributable to the production of net useful net thermal energy for the interim control periods of 2015 and 2016 as quantified under 310 CMR 7.70(8)(i).
- 5. Expiration of Exemption. A CO2 budget source that generates useful net thermal energy is no longer eligible under 310 CMR 7.70(6)(e)2. to have the Department deduct the number of tons of CO2 emissions attributable to the production of useful net thermal energy after the date on which an existing contract that was entered into prior to [date of promulgation] between the combined heat and power CO2 budget source and purchasers of useful net thermal energy expire, or the end of 2021, whichever is earlier.

ADD

310 CMR 7.70(5) CO₂ Allowance Allocations.

- (c) CO₂ Allowance Allocations
 - 5. <u>Useful Net Thermal Energy Retirement Account.</u>
 - a. Pursuant to 310 CMR 7.70(5)(c)4.c., the Department shall create a useful net thermal energy retirement account in the RGGI CO₂ Allowance Tracking System for the purpose of retiring CO₂ allowances equal to the amount of CO₂ emissions associated with attributable to the production of useful net thermal energy from combined heat and power CO₂ budget sources.
 - b. Each year, the Department shall retire CO_2 allowances equal to the amount of CO_2 emissions associated with attributable to the production of useful net thermal energy during the prior calendar year, as quantified and reported by the CO_2 authorized account representative pursuant to 310 CMR 7.70(8)(i).

AMEND

310 CMR 7.70(6) CO₂ Allowance Tracking System.

(e) Compliance

- 2. <u>DeductionDeductions for compliance.</u> Following the recordation, in accordance with 310 CMR 7.70(7)(b). of the CO₂ allowances transfer submitted for recordation in the CO₂ budget source's compliance account by the CO₂ allowance transfer deadline for a control period or interim control period, the Department, or its agent shall deduct CO₂ allowances available under 310 CMR 7.70(6)e.1. to cover the source's CO₂ emissions (as determined in accordance with 310 CMR 7.70(8)) for the control period or the interim control period, as follows:
 - a. Until the amount of CO_2 allowances deducted equals the number of tons of total CO_2 emissions (or 0.50 times the number of tons of total CO_2 emissions for the interim control period), less any CO_2 emissionemissions attributable to the burning of eligible biomass or the production of useful net thermal energy, determined in accordance with 310 CMR 7.70(8), from all CO_2 budget units at the CO_2 budget source for the control period or interim control period; or

ADD

310 CMR 7.70(8) Monitoring and Reporting

- (i) CO₂ Budget Units That Generate Useful Net Thermal Energy.
 - 1. The CO₂ authorized account representative of a combined heat and power CO₂ budget source that generates useful net thermal energy shall report the following information for the combined heat and power CO₂ budget source to the Department or its agent for each calendar quarter:
 - a. The total amount of useful net thermal energy output produced from the by CO₂ budget unit(s) at the combined heat and power CO₂ budget sourceunits expressed in MMBtu, the total volume of steam output produced from the by CO₂ budget unit(s) at the combined heat and power CO₂ budget sourceunits expressed in cubic feet, the average pressure of the steam output produced from the by CO₂ budget unit(s) at the combined heat and power CO₂ budget sourceunits expressed in pounds per square inch, and the average temperature of the steam expressed in degrees Fahrenheit. The amount of useful net thermal energy output shall be determined in a manner as approved by the Department in the CO₂ Budget Emission Control Plan consistent with the requirements of 40 CFR Part 75.-310 CMR 7.70(3) and 310 CMR 7.70(8)(h).
 - b. The total amount of CO₂ emissions from the CO₂ budget unit associated withunits attributable to the production of useful net thermal energy, in tons, calculated in accordance with 310 CMR 7.70(8)(i)2.
 - 2. The quantity of CO_2 emissions associated with attributable to the production of useful net thermal energy shall be determined by the following equation (rounded to the nearest whole ton):

<u>UNTE/.80 x 122 lb/MMBtu</u> 2000 lb/ton

Where:

UNTE = useful net thermal energy (in MMBtu $\frac{Output}{Output}$) generated by CO_2 budget units at the combined heat and power CO_2 budget source during the each calendar quarter.